MONSTROUS COBZILLA COB EFFECTS

COB RGB 5X5 PIXEL MATRIX

blizzard LIGHTING

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1. GETTING STARTED

What's In The Box?

- 1 x COBZilla™ COB RGB 5X5 Pixel Matrix
- This Lovely User Manual
- An Ever So Needed IEC Power Cord
- 8mm Hex Wrench

Getting It Out Of The Box

Congratulations on purchasing one of the newest, brightest, most impressive panels on the market! Now that you've got your COBZilla™ COB RGB 5X5 Pixel Matrix (or hopefully, *COBZillas™!*), you should carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything looks as if it has been damaged in transit, notify the shipper immediately and keep the packing material for inspection. Again, please save the carton and all packing materials. If a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Powering Up!

All fixtures must be powered directly off a switched circuit and **cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch**.

AC Voltage Switch - Not all fixtures have a voltage select switch, so please verify that the fixture you receive is suitable for your local power supply. See the label on the fixture or refer to the fixture's specifications chart for more information. A fixture's listed current rating is its average current draw under normal conditions. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Warning! ***Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Ground (Earthing).***

Getting A Hold Of Us

If something is wrong, just give us a call or send an email. We'll be happy to help, honest.

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SAFETY INSTRUCTIONS

Please read these instructions carefully. They include important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future use. If you sell the unit to someone else, be sure that they also receive this User Guide.

- ALWAYS make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.

- This product is intended for indoor use only.

- To prevent risk of fire or shock, do not expose fixture to rain or moisture.

- Make sure there are no flammable materials close to the unit while operating.

- The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.

- ALWAYS disconnect from the power source before servicing or replacing fuse and be sure to replace with same fuse size and type.

- ALWAYS secure fixture using a safety chain. NEVER carry the fixture by its cord. Use its carrying handles.

- DO NOT operate at ambient temperatures higher than 104°F (40°C).

- In the event of a serious operating problem, stop using the unit immediately. NEVER try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

- NEVER connect the device to a dimmer pack.

- Make sure the power cord is never crimped or damaged.

- Never disconnect the power cord by pulling or tugging on the cord.

- Avoid direct eye exposure to the light source while it is on.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact Blizzard Lighting at support@blizzardlighting.com.

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2. MEET THE COBZilla™ COB RGB 5X5 Pixel Matrix

CONTROL FEATURES

- 25 individually controllable COB (Chip-On Board) RGB LED's
- Variable electronic strobe
- Variable electronic dimmer
- Built-in automated programs via master/slave
- Sound Active via DMX
- Easy to use 4 button LCD Control Panel

ADDITIONAL FEATURES

- Very Rugged and well-built (yea, it works out alot)
- Lux: 12,100 @ 1m, 4,600 @ 2m
- Light source: 25 x 9 watt 3-in-1 COB LED's
- PowerCon™ Compatible Power In/Out
- 1/2-turn coffin-lock fixture link brackets
- 3-pin & 5-pin DMX In/Out

DMX Quick Reference (3-Channel Mode)

Channel	What It Does
1	Built-in Programs
2	Program Speed
3	Strobe

DMX Quick Reference (5-Channel Mode)

Channel	What It Does
1	Red 0%-100%
2	Green 0%-100%
3	Blue 0%-100%
4	Master Dimmer 0%-100%
5	Strobe

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DMX Quick Reference (75-Channel Mode)

Individual Pixel Control Dimmer 0%-100%					
CH 1	**CH 2**	**CH 3**	**CH 4**	**CH 5**	**CH 6**
Pixel 1 Red	Pixel 1 Blue	Pixel 1 Green	Pixel 2 Red	Pixel 2 Blue	Pixel 2 Green
CH 7	**CH 8**	**CH 9**	**CH 10**	**CH 11**	**CH 12**
Pixel 3 Red	Pixel 3 Blue	Pixel 3 Green	Pixel 4 Red	Pixel 4 Blue	Pixel 4 Green
CH 13	**CH 14**	**CH 15**	**CH 16**	**CH 17**	**CH 18**
Pixel 5 Red	Pixel 5 Blue	Pixel 5 Green	Pixel 6 Red	Pixel 6 Blue	Pixel 6 Green
CH 19	**CH 20**	**CH 21**	**CH 22**	**CH 23**	**CH 24**
Pixel 7 Red	Pixel 7 Blue	Pixel 7	Pixel 8 Red	Pixel 8 Blue	Pixel 8 Green
CH 25	**CH 26**	**CH 27**	**CH 28**	**CH 29**	**CH 30**
Pixel 9 Red	Pixel 9 Blue	Pixel 9 Green	Pixel 10 Red	Pixel 10 Blue	Pixel 10 Green
CH 31	**CH 32**	**CH 33**	**CH 34**	**CH 35**	**CH 36**
Pixel 11 Red	Pixel 11 Blue	Pixel 11 Green	Pixel 12 Red	Pixel 12 Blue	Pixel 12 Green
CH 37	**CH 38**	**CH 39**	**CH 40**	**CH 41**	**CH 42**
Pixel 13 Red	Pixel 13 Blue	Pixel 13 Green	Pixel 14 Red	Pixel 14 Blue	Pixel 14 Green
CH 43	**CH 44**	**CH 45**	**CH 46**	**CH 47**	**CH 48**
Pixel 15 Red	Pixel 15 Blue	Pixel 15 Green	Pixel 16 Red	Pixel 16 Blue	Pixel 16 Green
CH 49	**CH 50**	**CH 51**	**CH 52**	**CH 53**	**CH 54**
Pixel 17 Red	Pixel 17 Blue	Pixel 17 Green	Pixel 18 Red	Pixel 18 Blue	Pixel 18 Green
CH 55	**CH 56**	**CH 57**	**CH 58**	**CH 59**	**CH 60**
Pixel 19 Red	Pixel 19 Blue	Pixel 19 Green	Pixel 20 Red	Pixel 20 Blue	Pixel 20 Green
CH 61	**CH 62**	**CH 63**	**CH 64**	**CH 65**	**CH 66**
Pixel 21 Red	Pixel 21 Blue	Pixel 21 Green	Pixel 22 Red	Pixel 22 Blue	Pixel 22 Green
CH 67	**CH 68**	**CH 69**	**CH 70**	**CH 71**	**CH 72**
Pixel 23 Red	Pixel 23 Blue	Pixel 23 Green	Pixel 24 Red	Pixel 24 Blue	Pixel 24 Green
CH 73	**CH 74**	**CH 75**			
Pixel 25 Red	Pixel 25 Blue	Pixel 25			

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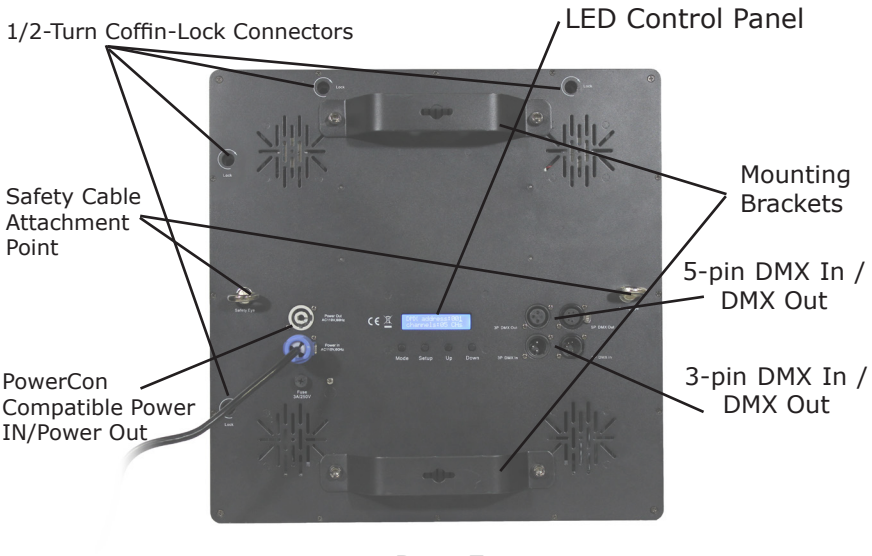
Figure 1: The COBZilla™ COB RGB 5X5 Pixel Matrix Pin-Up Picture

Figure 2: The Rear Connections



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3. SETUP

Before replacing a fuse, disconnect power cord. ALWAYS replace with the same type and rating of fuse.

Fuse Replacement

CAUTION! The COBZilla™ COB RGB 5X5 Pixel Matrix utilizes a high-output switch-mode power supply with an internal fuse. Under normal operating conditions, the fuse should not require replacement. The fuse is field replaceable, however it is an advanced procedure suited to qualified individuals. Should your COBZilla™ COB RGB 5X5 Pixel Matrix™ fuse require replacement, please contact Blizzard Lighting for instructions, or to return your unit for service.

Connecting A Bunch of COBZilla™ COB RGB 5X5 Pixel Matrix Fixtures

You will need a serial data link to run light shows using a DMX-512 controller or to run shows on two or more fixtures set to sync in master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. Also, connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.
The maximum recommended cable-run distance is 500 meters (1640 ft). The maximum recommended number of fixtures on a serial data link is 32 fixtures.

Data/DMX Cabling

To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

For instance, Belden© 9841 meets the specifications for EIA RS-485 applications. Standard microphone cables will "probably" be OK, but note that they cannot transmit DMX data as reliably over long distances. In any event, the cable should have the following characteristics:

2-conductor twisted pair plus a shield
Maximum capacitance between conductors – 30 pF/ft.
Maximum capacitance between conductor & shield – 55 pF/ft.
Maximum resistance of 20 ohms / 1000 ft.
Nominal impedance 100 – 140 ohms

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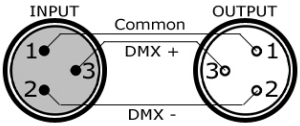
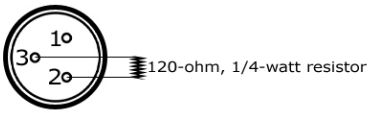
Cable Connectors

Cables must have a male XLR connector on one end and a female XLR connector on the other end. (Duh!)



A Word on Termination: DMX is a resilient communication protocol, however errors still occasionally occur. Termination reduces signal errors, and therefore best practices include use of a terminator in all circumstances. If you are experiencing problems with erratic fixture behavior, especially over long signal cable runs, a terminator may help improve performance.

To build your own DMX Terminator: Obtain a 120-ohm, 1/4-watt resistor, and wire it between pins 2 & 3 of the last fixture. They are also readily available from specialty retailers.



CAUTION: Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin??? 5-Pin??? Huh?!?

If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. They are widely available over the internet and from specialty retailers If you'd like to build your own, the chart below details a proper cable conversion:

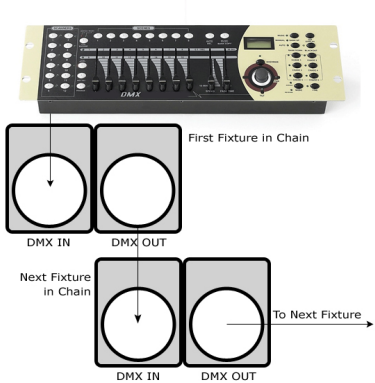
Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
DMX Data (-)	Pin 2	Pin 2
DMX Data (+)	Pin 3	Pin 3
Not Used.	No Connection.	No Connection.
Not Used.	No Connection.	No Connection.

Take It To The Next Level: Setting Up DMX Control

Step 1: Connect the male connector of the DMX cable to the female connector (output) on the controller.

Step 2: Connect the female connector of the DMX cable to the first fixture's male connector (input). *Note:* It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

Step 3: Connect other fixtures in the chain from output to input as above. Place a DMX terminator on the output of the final fixture to ensure best communication.



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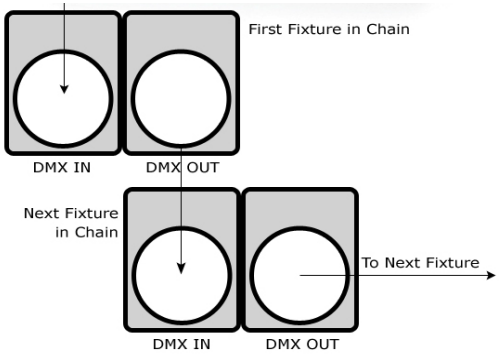
Fixture Linking (Master/Slave Mode)

1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.



A quick note: Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via either settings in the control panel or DIP-switches. Secondarily, the fixtures that follow may also require a slave setting.

Check the "**Operating Adjustments**" section in this manual for complete instructions for this type of setup and configuration.

Mounting & Rigging

This fixture may be mounted in any SAFE position provided there is enough room for ventilation.

It is important never to obstruct the fan or vents pathway. Mount the fixture using a suitable "C" or "O" type clamp. The clamp should be rated to hold at least 10x the fixture's weight to ensure structural stability. Do not mount to surfaces with unknown strength, and ensure properly "rated" rigging is used when mounting fixutres overhead.

Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration lamp replacement access (if applicable) and routine maintenance.
- Safety cables MUST ALWAYS be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

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4. OPERATING ADJUSTMENTS

The Control Panel

All the goodies and different modes possible with the COBZilla™ COB RGB 5X5 Pixel Matrix are accessed by using the control panel on the rear of the fixture. There are 4 control buttons below the LED display which allow you to navigate through the various control panel menus.

<MODE>

Is used to navigate to the previous higher-level menu item.

<SETUP>

Scrolls through individual menu options

<UP>

Scrolls through menu items and numbers in Ascending order.

<DOWN>

Scrolls through menu items and numbers in Descending order.

The Control Panel LED Display shows the menu items you select from the menu map on page #11. When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press **<MODE>**.

Press the **<MODE>** button repeatedly until you reach the desired menu function. Use the **<SETUP>** button to navigate the menu options. Press the **<MODE>** button to select the menu function currently displayed, or to enable a menu option. To return to the previous option or menu without changing the value, press the **<MODE>** button.

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Control Panel Menu Structure

Main Function	What it looks like	Selection	What It Does...
DMX Address/ Channel	DMX address: 001 channels: 03, 05, 75 CHs	**<MODE>** **<SETUP>**	Sets the DMX address <UP> or <DOWN> to select address Change channel mode 03, 05, or 75 channels
Slave Mode	SLAVE MODE ==========	**<MODE>**	Sets the unit to run in slave mode
Sound Active Mode	SOUND TRIGGER sensitivity 00-31	**<MODE>** **<SETUP>**	Sound Active Mode Change sensitivity 00-31
Static Mode	STATIC COLOR R255 G255 B255	**<MODE>** **<SETUP>**	Individual Color Mode Use <UP> or <DOWN> to select each color setting
Built-In Programs	RUN PROGRAM: 01-19 SP: 001-100 FS: 000-100	**<MODE>** **<SETUP>**	Built-In Program Mode Speed Selection / Strobe Setting (001-100) Use <UP> or <DOWN> to select each setting
Auto Programs	AUTO times: 001-100 SP: 001-100 FS: 001-100	**<MODE>** **<SETUP>**	Auto Program Mode (Use <UP> or <DOWN> to select each program (001-100) Speed Selection / Strobe Setting (001-100) Use <UP> or <DOWN> to select each setting

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DMX Mode

Allows the unit to be controlled by any universal DMX controller. If you are unfamiliar with DMX, please read the DMX Primer on page #16.

The COBZilla™ COB RGB 5X5 Pixel Matrix is capable of operating with 3, 5, or 75 DMX channels. To select the channel mode that you desire,

1:) Press the **<MODE>** button to select DMX address: 001 on the LED Readout.

2:) Then press the **<SETUP>** button to select channel mode,

channels: 03, 05, 75 CHs. Use the **<UP>** or **<DOWN>** to select desired channel.

Auto, Master/Slave, Sound Active & Static Color Modes:

Allows a single or Master/Slaved units to run factory installed programs at user selectable speeds.

1.) To set the fixture to one of the Built-in Programs,

select RUN PROGRAM: 01-19 using the **<MODE>** button. Select desired program by using the **<UP>** and **<DOWN>** buttons

2.) To set the program and Strobe setting, select SP: 001-100 FS: 000-100 using the **<SETUP>** button then the **<UP>** and **<DOWN>** buttons to choose desired program/strobe function. Press the **<MODE>** button to switch between settings.

3:) To use Auto Mode, Press the **<MODE>** button to reach

AUTO times: 001-100. Use the **<UP>** and **<DOWN>** buttons to choose desired program

4:) To set the program speed and Strobe setting,

select SP: 001-100 FS: 000-100 using the **<SETUP>** button then the **<UP>** and **<DOWN>** buttons to choose desired program/strobe function. Press the **<MODE>** button to switch between settings.

Master/Slave Mode:

1:) Each fixture is a master by default. To set the fixture as a slave, use the

<MODE> button to reach SLAVE MODE

==========

2.) Press the **<MODE>** button to exit out of the menu.

Sound Active Mode:

1.) To use sound active mode, select SOUND TRIGGER by pressing **<MODE>.**

2.) Press the **<SETUP>** button to change the sensitivity 00-31 by using the **<UP>** and **<DOWN>** buttons.

3.) Press the **<MODE>** button to exit sound trigger mode.

Color Static Mode:

1.) Press the **<MODE>** button to reach STATIC COLOR.

2:) Then press the **<SETUP>** button to set the color R255 G255 B255.

By using the **<UP>** and **<DOWN>** buttons, this allows you to change each value. (000-255)

3.) Press the **<MODE>** button to exit static color mode.

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DMX Values In-Depth (3-Channel Mode)

Channel	Channel Value	Does...
1	 000 001 <-> 012 013 <-> 025 026 <-> 038 039 <-> 051 052 <-> 064 065 <-> 077 078 <-> 090 091 <-> 103 104 <-> 116 117 <-> 129 130 <-> 142 143 <-> 155 156 <-> 168 169 <-> 181 182 <-> 194 195 <-> 207 208 <-> 220 221 <-> 233 234 <-> 255	**Built-in Programs** Off Program 1 Program 2 Program 3 Program 4 Program 5 Program 6 Program 7 Program 8 Program 9 Program 10 Program 11 Program 12 Program 13 Program 14 Program 15 Program 16 Program 17 Program 18 Sound Active
2	000 <-> 233 234 <-> 255	**Speed of Program** **Sensativity for Sound Active Mode**
3	000 <-> 233 234 <-> 255	**Strobe Rate** **No function in Sound Active Mode**

DMX Values In-Depth (5-Channel Mode)

Channel	Channel Value	Does...
1	000 <-> 255	**Red Dimmer 0%-100%**
2	000 <-> 255	**Green Dimmer 0%-100%**
3	000 <-> 255	**Blue Dimmer 0%-100%**
4	000 <-> 255	**Master Dimmer 0%-100%**
5	000 <-> 255	**Strobe Rate 0%-100%**

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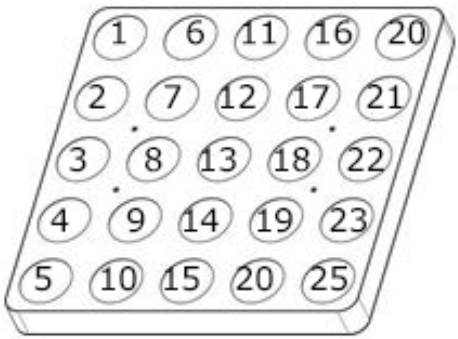
DMX Values In-Depth (75-Channel Mode)

Channel	Channel Value	What It Does...
1-3	000 <-> 255	Pixel 1 Individual Red/Green/Blue Dimmers 0%-100%
4-6	000 <-> 255	Pixel 2 Individual Red/Green/Blue Dimmers 0%-100%
7-9	000 <-> 255	Pixel 3 Individual Red/Green/Blue Dimmers 0%-100%
10-12	000 <-> 255	Pixel 4 Individual Red/Green/Blue Dimmers 0%-100%
13-15	000 <-> 255	Pixel 5 Individual Red/Green/Blue Dimmers 0%-100%
16-18	000 <-> 255	Pixel 6 Individual Red/Green/Blue Dimmers 0%-100%
19-21	000 <-> 255	Pixel 7 Individual Red/Green/Blue Dimmers 0%-100%
22-24	000 <-> 255	Pixel 8 Individual Red/Green/Blue Dimmers 0%-100%
25-27	000 <-> 255	Pixel 9 Individual Red/Green/Blue Dimmers 0%-100%
28-30	000 <-> 255	Pixel 10 Individual Red/Green/Blue Dimmers 0%-100%
31-33	000 <-> 255	Pixel 11 Individual Red/Green/Blue Dimmers 0%-100%
34-36	000 <-> 255	Pixel 12 Individual Red/Green/Blue Dimmers 0%-100%
37-39	000 <-> 255	Pixel 13 Individual Red/Green/Blue Dimmers 0%-100%
40-42	000 <-> 255	Pixel 14 Individual Red/Green/Blue Dimmers 0%-100%
43-45	000 <-> 255	Pixel 15 Individual Red/Green/Blue Dimmers 0%-100%
46-48	000 <-> 255	Pixel 16 Individual Red/Green/Blue Dimmers 0%-100%
49-51	000 <-> 255	Pixel 17 Individual Red/Green/Blue Dimmers 0%-100%
52-54	000 <-> 255	Pixel 18 Individual Red/Green/Blue Dimmers 0%-100%
55-57	000 <-> 255	Pixel 19 Individual Red/Green/Blue Dimmers 0%-100%
58-60	000 <-> 255	Pixel 20 Individual Red/Green/Blue Dimmers 0%-100%
61-63	000 <-> 255	Pixel 21 Individual Red/Green/Blue Dimmers 0%-100%
64-66	000 <-> 255	Pixel 22 Individual Red/Green/Blue Dimmers 0%-100%
67-69	000 <-> 255	Pixel 23 Individual Red/Green/Blue Dimmers 0%-100%
70-72	000 <-> 255	Pixel 24 Individual Red/Green/Blue Dimmers 0%-100%
73-75	000 <-> 255	Pixel 25 Individual Red/Green/Blue Dimmers 0%-100%



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Troubleshooting

Symptom	Solution
Fixture Auto-Shut Off	Check the fan in the fixture. If it is stopped or moving slower than normal, the unit may have shut itself off due to high heat. This is to protect the fixture from overheating. Clear the fan of obstructions, or return the unit for service.
Beam is Dim	Check optical system and clean excess dust/grime. Also ensure that the 220V/110V switch is in the correct position, if applicable.
No Light Output	Check to ensure fixture is operating under correct mode, IE sound active/auto/DMX/Etc., if applicable. Contact service for more information.
Chase Speed Too Fast/Slow	Check to ensure proper setup of speed adjustment.
No Power	Check fuse, AC cord and circuit for malfunction.
Blown Fuse	Check AC cord and circuit for damage, verify that moving parts are not restricted and that unit's ventilation is not obstructed
Slow Movement	Verify that 220V/110V switch is in the correct position, if applicable. Also check that speed channels are set appropriately.
No Response to Audio	Verify that the fixture is in "Sound Active" mode. Adjust Audio Sensitivity, If Applicable.
Fixture Not Responding / Responding Erraticly	Make sure all connectors are seated properly and securely. Use Only DMX Cables. Install a Terminator. Check all cables for defects. Reset fixture(s).
Intermittant Lamp	Check lamp for properly installation. Relamp, lamp may have reached end of life.
Remote Doesn't Work	Verify remote control cable is installed properly and securely. Verify remote is correct type (CA-9 or other as applicable.)
Fixture Moving On Its Own	Verify proper mode of operation. Is the fixture in "Auto" mode?

If your problem isn't listed, or if problems persist, please contact support: support@blizzardlighting.com.

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5. APPENDIX

A Quick Lesson On DMX

DMX (aka DMX-512) was created in 1986 by the United States Institute for Theatre Technology (USITT) as a standardized method for connecting lighting consoles to lighting dimmer modules. It was revised in 1990 and again in 2000 to allow more flexibility. The Entertainment Services and Technology Association (ESTA) has since assumed control over the DMX512 standard. It has also been approved and recognized for ANSI standard classification.

DMX covers (and is an abbreviation for) Digital MultipleXed signals. It is the most common communications standard used by lighting and related stage equipment.

DMX provides up to 512 control "channels" per data link. Each of these channels was originally intended to control lamp dimmer levels. You can think of it as 512 faders on a lighting console, connected to 512 light bulbs. Each slider's position is sent over the data link as an 8-bit number having a value between 0 and 255. The value 0 corresponds to the light bulb being completely off while 255 corresponds to the light bulb being fully on.

DMX data is transmitted at 250,000 bits per second using the RS-485 transmission standard over two wires. As with microphone cables, a grounded cable shield is used to prevent interference with other signals.

There are five pins on a DMX connector: a wire for ground (cable shield), two wires for "Primary" communication which goes from a DMX source to a DMX receiver, and two wires for a "Secondary" communication which goes from a DMX receiver back to a DMX source. Generally, the "Secondary" channel is not used so data flows only from sources to receivers. Hence, most of us are most familiar with DMX-512 as being employer over typical 3-pin "mic cables," although this does not conform to the defined standard.

DMX is connected using a daisy-chain configuration where the source connects to the input of the first device, the output of the first device connects to the input of the next device, and so on. The standard allows for up to 32 devices on a single DMX link.

Each receiving device typically has a means for setting the "starting channel number" that it will respond to. For example, if two 6-channel fixtures are used, the first fixture might be set to start at channel 1 so it would respond to DMX channels 1 through 6, and the next fixture would be set to start at channel 7 so it would respond to channels 7 through 12.

The greatest strength of the DMX communications protocol is that it is very simple and robust. It involves transmitting a reset condition (indicating the start of a new "packet"), a start code, and up to 512 bytes of data. Data packets are transmitted continuously. As soon as one packet is finished, another can begin with no delay if desired (usually another follows within 1 ms). If nothing is changing (i.e. no lamp levels change) the same data will be sent out over and over again. This is a great feature of DMX -- if for some reason the data is not interpreted the first time around, it will be re-sent shortly.

Not all 512 channels need to be output per packet, and in fact, it is very uncommon to find all 512 used. The fewer channels are used, the higher the "refresh" rate. It is possible to get DMX refreshes at around 1000 times per second if only 24 channels are being transmitted. If all 512 channels are being transmitted, the refresh rate is around 44 times per second.

In summary, since its design and evolution in the 1980's DMX has become the standard for lighting control. It is flexible, robust, and scalable, and its ability to control everything from dimmer packs to moving lights to foggers to lasers makes it an indispensible tool for any lighting designer or lighting performer.

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Keeping Your COBZilla™ COB RGB 5X5 Pixel Matrix As Good As New

The fixture you've received is a rugged, tough piece of pro lighting equipment, and as long as you take care of it, it will take care of you. That said, like anything, you'll need to take care of it if you want it to operate as designed. You should absolutely keep the fixture clean, especially if you are using it in an environment with a lot of dust, fog, haze, wild animals, wild teenagers or spilled drinks.

Cleaning the optics routinely with a suitable glass cleaner will greatly improve the quality of light output. Keeping the fans free of dust and debris will keep the fixture running cool and prevent damage from overheating.

In transit, keep the fixtures in cases. You wouldn't throw a prized guitar, drumset, or other piece of expensive gear into a gear trailer without a case, and similarly, you shouldn't even think about doing it with your shiny new light fixtures.

Common sense and taking care of your fixtures will be the single biggest thing you can do to keep them running at peak performance and let you worry about designing a great light show, putting on a great concert, or maximizing your client's satistfaction and "wow factor." That's what it's all about, after all!

Returns (Gasp!)

We've taken a lot of precautions to make sure you never even have to worry about sending a defective unit back, or sending a unit in for service. But, like any complex piece of equipment designed and built by humans, once in a while, something doesn't go as planned. If you find yourself with a fixture that isn't behaving like a good little fixture should, you'll need to obtain a Return Authorization (RA).

Don't worry, this is easy. Just send an email to support@blizzardlighting.com, and we'll issue you an RA. Then, you'll need to send the unit to us using a trackable, pre-paid freight method. We suggest using USPS Priority or UPS. Make sure you carefully pack the fixture for transit, and whenever possible, use the original box & packing for shipping.

When returning your fixture for service, be sure to include the following:

1.) Your contact information (Name, Address, Phone Number, Email address).
2.) The RA# issued to you
3.) A brief description of the problem/symptoms.

We will, at our discretion, repair or replace the fixture. Please remember that any shipping damage which occurs in transit to us is the customer's responsibility, so pack it well!

Shipping Issues

Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.

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Tech Specs!

Weight & Dimensions	
Length	17.75 inches (451 mm)
Depth	6 inches (152.4 mm)
Height	17.75 inches (451 mm)
Weight	25.45 lbs (11.56 kg)
Power	
Operating Voltage	100-240V AC, 50-60 Hertz
Fuse	3A 250V
Power Consumption	2400W
	.69A Inrush, 2.43A Max. Operating
	Power Factor: .99
Light Source	
COB (Chip-On-Board) LED	25x 9W 700ma, 50,000 hours.
Optical	
Beam Angle	55 degrees
Luminous Intensity	12,100 Lux @ 1m 4,600 Lux @ 2m
Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512
DMX Channels	3/5/75
Input	3-Pin XLR Male / 5-Pin XLR Male
Output	3-Pin XLR Female / 5-Pin XLR Female
Other Operating Modes	Auto, Master/Slave, Sound Active, Static Color Mode
WATCH OUT! It's Godzilla!!! WAIT~ No, IT'S.... COBZilla™ COB RGB	
The **COBZilla™ COB RGB 5X5 Pixel Matrix** has such power and beauty, no other matrix's can compare! This light will make your guests stare in amazement, much like Godzilla!	
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LED's.

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Enjoy your product!
Our sincerest thanks for your purchase!
--The team @ Blizzard Lighting